

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-32 without prejudice.

1-32. (Cancelled)

Please add the following claims:

33. (New) A method comprising:

transmitting a request from a first network element to a second network element to monitor at least one object on the second network element;

receiving the request at the second network element;

logging information about the at least one object by the second network element in response to a change in value of the object;

transmitting an indication from the second network element to the first network element of the change in value of the at least one object; and

reading by the first element of the information logged on the second network element in response to the transmitted indication.

34. (New) The method of claim 33, wherein receiving the request at the second network element to monitor the at least one object on the network element comprises establishing a rule in a management information base rules table on the second network element to monitor a configuration object on the second network element.

35. (New) The method of claim 34, wherein monitoring the configuration object comprises logging a change in value of the configuration object as specified by the request.

36. (New) The method of claim 34, wherein monitoring the configuration object comprises specifying the configuration object's object identifier in the management information base tree.

37. (New) The method of claim 36, wherein specifying the configuration object's object identifier comprises using a less specific object identifier in the management information base tree, if monitoring the configuration object is not supported in the management information base tree.

38. (New) The method of claim 33, wherein logging information by the second network element in response to a change in value of the object comprises logging information about the change in the second network element's configuration in a management information base instance table.

39. (New) The method of claim 33, wherein the first network element comprises a network management station.

40. (New) The method of claim 39, wherein transmitting an indication from the second network element of the change in value of the object comprises transmitting a SNMP (Simple Network Management Protocol) trap to the network management station whenever a change in value of the object is detected by the second network element.

41. (New) The method of claim 33, wherein transmitting a request to the second network element to monitor the at least one object on the second network element comprises the first network element writing a rule to a management information base rules table on the second network element to monitor a configuration object of the second network element.

42. (New) The method of claim 41, wherein writing a rule to the management information base rules table on the second network element to monitor the configuration object further comprises writing a rule to monitor at least one of an addition, deletion, modification or a change in value of the configuration object by the second network element.

43. (New) The method of claim 41, wherein writing a rule to the management information base rules table on the second network element to monitor the configuration object further comprises specifying the configuration object's object identifier in a management information base tree.

44. (New) The method of claim 33, wherein reading the information logged on the second network element in response to the indication received comprises the first network element reading the information logged in a management information base instance table on the second network element.

45. (New) An article of manufacture comprising a machine-readable medium that provides instructions, that when executed by a machine, cause the machine to perform operations comprising:

transmitting a request from a first network element to a second network element to monitor at least one object on the second network element;

receiving the request at the second network element;

logging information about the at least one object by the second network element in response to a change in value of the object;

transmitting an indication from the second network element to the first network element of the change in value of the at least one object; and

reading by the first element of the information logged on the second network element in response to the transmitted indication.

46. (New) The medium of claim 45, wherein receiving the request at the second network element to monitor the at least one object on the network element comprises establishing a rule in a management information base rules table on the second network element to monitor a configuration object on the second network element.

47. (New) The medium of claim 46, wherein monitoring the configuration object comprises logging a change in value of the configuration object as specified by the request.

48. (New) The medium of claim 46, wherein monitoring the configuration object comprises specifying the configuration object's object identifier in the management information base tree.

49. (New) The medium of claim 48, wherein specifying the configuration object's object identifier comprises using a less specific object identifier in the management

information base tree, if monitoring the configuration object is not supported in the management information base tree.

50. (New) The medium of claim 45, wherein logging information by the second network element in response to a change in value of the object comprises logging information about the change in the second network element's configuration in a management information base instance table.

51. (New) The medium of claim 45, wherein the first network element comprises a network management station.

52. (New) The medium of claim 51, wherein transmitting an indication from the second network element of the change in value of the object comprises transmitting a SNMP (Simple Network Management Protocol) trap to the network management station whenever a change in value of the object is detected by the second network element.

53. (New) The medium of claim 45, wherein transmitting a request to the second network element to monitor the at least one object on the second network element comprises the first network element writing a rule to a management information base rules table on the second network element to monitor a configuration object of the second network element.

54. (New) The medium of claim 53, wherein writing a rule to the management information base rules table on the second network element to monitor the configuration object further comprises writing a rule to monitor at least one of an addition, deletion,

modification or a change in value of the configuration object by the second network element.

55. (New) The medium of claim 53, wherein writing a rule to the management information base rules table on the second network element to monitor the configuration object further comprises specifying the configuration object's object identifier in a management information base tree.

56. (New) The medium of claim 45, wherein reading the information logged on the second network element in response to the indication received comprises the first network element reading the information logged in a management information base instance table on the second network element.

57. (Original) An apparatus comprising:

 a transceiver to transmit a request to a network element to monitor at least one configuration object on the network element, and to read information logged in a management information base instance table on the network element; and

 a microprocessor communicatively coupled to the transceiver, and a memory to execute a program to analyze information received from the network element and to manage the configuration of the network element based on the information analyzed;

 the transceiver to receive an indication from the network element in response to a change in the value of the configuration object, the transceiver to read the information logged in the management information base instance table on the network element in response to the indication of change in the value of the configuration object.

58. (New) The apparatus of claim 57, wherein the indication received by the receiver is a SNMP trap.

59. (New) The apparatus of claim 57, wherein the network element maintains a management information base rules table containing the object identifiers of the configuration objects to be monitored.

60. (New) A method comprising:

receiving a request at a network element to monitor at least one object on the network element;

logging information about the at least one object by the network element in response to a change in value of the object;

transmitting an indication from the network element of the change in value of the at least one object; and

receiving a request at the network element to read the information about the at least one object logged on the network element in response to the transmitted indication;

wherein receiving a request at a network element to monitor at least one object on the network element comprises establishing a rule in a management information base rules table on the network element to monitor a configuration object on the network element, and wherein monitoring a configuration object comprises specifying the configuration object's object identifier in the management information base tree, and wherein specifying the configuration object's object identifier comprises using a less specific object identifier in the management information base tree, if monitoring the configuration object is not supported in the management information base tree.

61. (New) The method of claim 60, wherein logging information by the network element in response to a change in value of the object comprises logging information about the change in the network element's configuration in a management information base instance table.
62. (New) The method of claim 60, wherein receiving a request at a network element to monitor at least one object on the network element comprises receiving a request from one or more network management stations to monitor at least one object on the network element.
63. (New) The method of claim 60, wherein transmitting an indication from the network element of the change in value of the object comprises transmitting a SNMP trap to a network management station whenever a change in value of the object is detected by the network element.
64. (New) The method of claim 60, wherein receiving a request at the network element to read the information logged on the network element in response to the transmitted indication comprises a network management station reading the logged data from a management information base instance table on the network element.
65. (New) A method comprising:
 - transmitting a request to a network element to monitor at least one object on the network element;
 - receiving an indication from the network element in response to a change in the value of the object being monitored; and

reading information logged on the network element in response to the indication received;

wherein transmitting a request to the network element to monitor at least one object on the network element comprises writing a rule to a management information base rules table on the network element to monitor a configuration object of the network element, and wherein writing a rule to a management information base rules table on the network element to monitor a configuration object further comprises writing a rule to monitor at least one of an addition, deletion, modification or a change in value of the configuration object by the network element.

66. (New) The method of claim 65, wherein writing a rule to a management information base rules table on the network element to monitor a configuration object further comprises specifying the configuration object's object identifier in the management information base tree.

67. (New) The method of claim 65, wherein receiving an indication from the network element in response to a change in the value of the object being monitored comprises receiving a SNMP trap from the network element.

68. (New) The method of claim 65, wherein reading information logged on the network element in response to the indication received comprises reading the information logged in a management information base instance table on the network element.

69. (New) An article of manufacture comprising a machine-readable medium that provides instructions, that when executed by a machine, cause said machine to perform operations comprising:

receiving a request at a network element to monitor at least one object on the network element;

logging information about the at least one object by the network element in response to a change in value of the object;

transmitting an indication from the network element of the change in value of the at least one object; and

receiving a request at the network element to read the information about the at least one object logged on the network element in response to the transmitted indication;

wherein receiving a request at the network element to monitor at least one object on the network element includes establishing a rule in a management information base rules table on the network element to monitor a configuration object of the network element, and wherein monitoring a configuration object on the network element includes specifying the configuration object's object identifier in the management information base tree.

70. (New) The medium of claim 69, wherein said instructions for specifying the configuration object's object identifier includes further instructions to direct said machine to specify a previous object identifier in the management information base tree if the specified configuration object's object identifier is not defined in the management information base.

71. (New) The machine-readable medium of claim 69, wherein said instructions for transmitting an indication from the network element of the change in value of the object includes further instructions to direct said machine to transmit a SNMP trap to a network

management station whenever a change in value of the object is detected by the network element.

72. (New) The machine-readable medium of claim 69, wherein said instructions for receiving a request at the network element to read the information logged on the network element in response to the transmitted indication includes further instructions for a network management station reading the logged data from a management information base instance table on the network element.

73. (Original) An article of manufacture comprising a machine-readable medium that provides instructions, that when executed by a machine, cause said machine to perform operations comprising:

transmitting a request to a network element to monitor at least one object on the network element;

receiving an indication from the network element in response to a change in the value of the object being monitored; and

reading information logged on the network element in response to the indication received;

wherein transmitting a request to the network element to monitor at least one object on the network element includes writing a rule to a management information base rules table on the network element to monitor a configuration object of the network element, wherein writing a rule to a management information base rules table on the network element to monitor a configuration object includes writing a rule to monitor at least one of an addition, deletion, modification or a change in value of the configuration object by the network element.

74. (New) The medium of claim 73, wherein receiving an indication from the network element in response to a change in the value of the object being monitored includes further instructions to read the information logged in a management information base instance table on the network element.

75. (New) An article of manufacture comprising a machine-readable medium that provides instructions, that when executed by a machine, cause said machine to perform operations comprising:

transmitting a request to a network element to monitor at least one object on the network element;

receiving an indication from the network element in response to a change in the value of the object being monitored; and

reading information logged on the network element in response to the indication received;

wherein transmitting a request to the network element to monitor at least one object on the network element includes writing a rule to a management information base rules table on the network element to monitor a configuration object of the network element, and wherein writing a rule to a management information base rules table on the network element to monitor a configuration object includes specifying the configuration object's object identifier in the management information base tree.

76. (New) The medium of claim 75, wherein receiving an indication from the network element in response to a change in the value of the object being monitored

includes further instructions to read the information logged in a management information base instance table on the network element.